

* SWBAT observe what happens to acceleration as mass goes up
(keeping the same pull)

Sep 6-2:31 PM

Welcome!!!

SECA Physics
Monday 20 October 2014

H. Leslie Grebe

Centering...

- * Pick up:
 - slip of paper (for later)

PED...

Opening Question:

Aunt Minnie is cruising down the highway at 80 mph east when she spots a cop car. Over the next 3 seconds she slows down until she is going 50 mph east.

Acceleration is... $\frac{\Delta v}{\Delta t}$

Can you get the 2 pieces we need from the description?

$\Delta v = -30 \text{ mi/hr}$ $\Delta t = 3 \text{ s.}$
What is Aunt Minnie's acceleration?

$$a = \frac{\Delta v}{\Delta t} = \frac{-30 \text{ mi/hr}}{3 \text{ s}} = -10 \text{ mi/hr/s}$$

Sep 7-7:04 AM

Catchy Physics Phrases...

Newton's 1st Law:

(Objects at...

Inertia is ...

Mass is ...

REST TEND TO STAY AT REST
IN MOTION TEND TO STAY IN MOTION

MATTER RESISTING

CHANGES IN
MOTION

HOW WE MEASURED INERTIA

Centering...

ACCELERATION

Oct 25-7:24 AM

Big question:

What is the relationship between
mass and **acceleration**???

* How could we test this out?

Roles:

- timer
- recorder
- equipment manager

Make a prediction...

MORE MASS \rightarrow LONGER TIME

Let's graph it...

TPS:

EMPTY
CART

+500g

+1000g

+1500g

4 TRIES
EACH

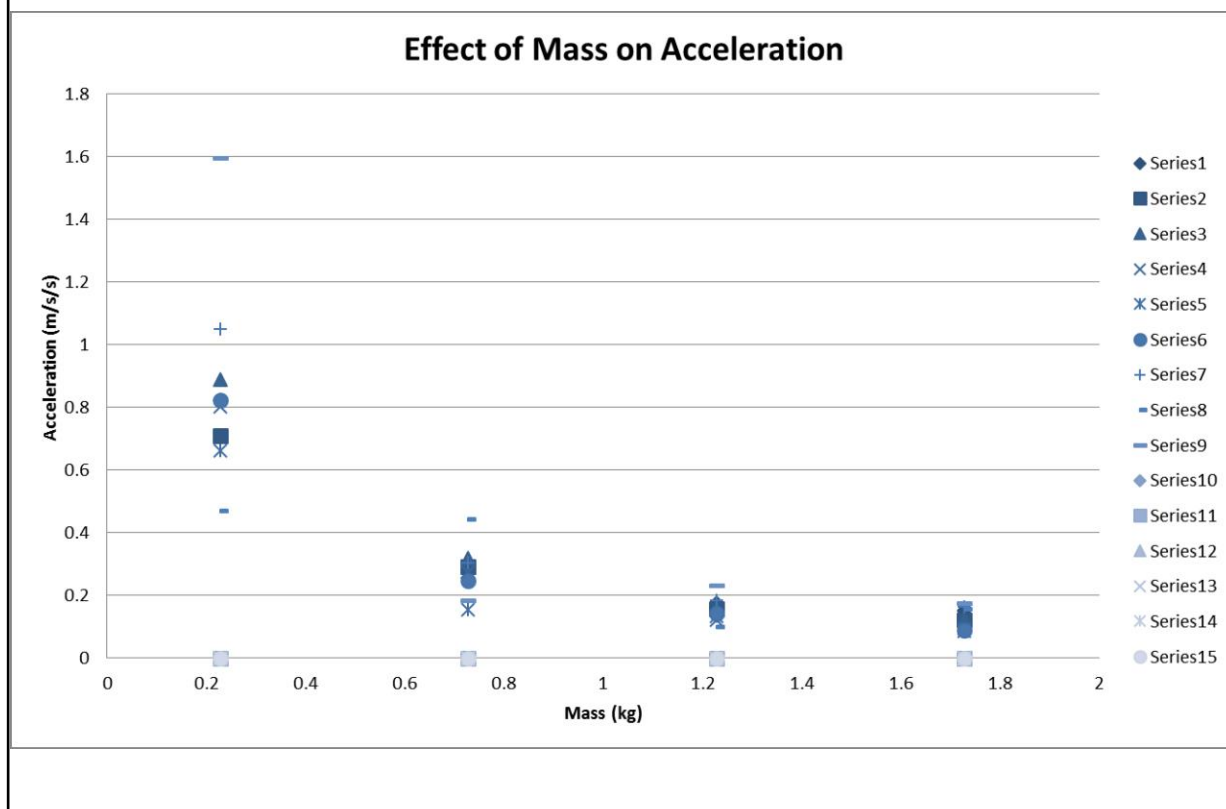
FROM 80cm -
30cm

50g TO PULL
ALWAYS

READY, SET, GO

Oct 25-7:25 AM

Graph:



Oct 21-1:23 PM

What do we see?

↑ LABELED
 MORE MASS \Rightarrow LESS
 ACCELERATION
 ↓
 DIST & TIME

Oct 25-7:28 AM

Daily 3 Questions

CP Homework: Do pg 16 #3

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. How many trials did we do at each mass?

4

2. We can figure out speed and acceleration because we measured distance and TIME .

3. More mass means

A. more acceleration

☒ B. less acceleration

C. same acceleration

Oct 8-6:48 AM